JOURNAL

OF THE

BRITISH SOCIETY OF DOWSERS

Vol. V. No. 35 March, 1942

CONTENTS

	Page
Notices	1
New Members	2
Dowsing Phenomena and the Electrical Aspect	3
Colour and Dowsing	11
A Modified Pogson Motorscope	13
The Physics of Healing by Human Radiation	18
A Study of the Work of John Timms	24
Adventures in Dowsing	31
Notes and News	36
Books on Dowsing	40

Price to Non-Members, **1/3**

BRITISH SOCIETY OF DOWSERS

COUNCIL

President :

COLONEL A. H. BELL, D.S.O., O.B.E.
Address : York House, Portugal Street, London, W.C.2.

Hon. Secretary and Treasurer :

LT.-COLONEL H. M. EDWARDS, D.S.O.
Address : 56 Oxhey Road, Watford, Herts.

Miss M. E. Macqueen — Major C. A. Pogson, M.C.
Dr. Hector Munro, M.B. — Captain W. H. Trinder

OBJECTS OF THE SOCIETY

(*a*) To encourage the study of all matters connected with the perception of radiation by the human organism with or without an instrument.

(*b*) To spread information amongst members, by means of a journal, lectures and other means, about the use of dowsing for geophysical, medical and agricultural and other purposes and for tracing objects animate or inanimate.

(*c*) To keep a register of dowsers for water, minerals, oil, and for other purposes.

RULES OF THE SOCIETY

I.—Membership.

The Society is open to all persons interested in radiation-perception.

The Council has power to appoint honorary members.

II.—Subscription.

The subscription is five shillings per annum, or three guineas for a life member.*

III.—Management.

The Society will be managed by a Council consisting of a President, who will act as Chairman, and five members, one of whom will act as Treasurer and Secretary.

The President and members will be replaced as necessary by the Council, appointments being confirmed at a General Meeting.

All questions regarding the publication of the journal, lectures, meetings, etc., will be settled by the Council.

Decisions of the Council will be arrived at by correspondence if necessary, the facts being recorded in the Minute Book.

Decisions will be decided by a majority vote, the Chairman having a casting vote.

The Council has power to co-opt other members for special purposes.

IV.— Accounts.

The financial year will be from July 1st to June 30th.

Accounts will be published annually within two months after the end of the financial year.

Accounts will be audited privately.

V.—General Meeting.

A General Meeting will be held annually, and other meetings when considered necessary by the Council.

* Pending a revision of the rates of subscription, no more life members are being accepted at present.

JOURNAL OF THE

BRITISH SOCIETY OF DOWSERS

Vol. V. No. 35 March, 1942

NOTICES

Members who have not yet paid their subscriptions for the current year, July 1st, 1941, to June 30th, 1942, are kindly asked to do so without further reminder.

* * * * *

Owing to the extra cost of production the price of *Journals* to non-members will in future be 1s. 3d.

The price of new *Journals* in excess of the free number and of old *Journals* to members will be 9d. and 6d. each respectively.

Six free copies of the *Journal* will be given on request to authors of articles in it in addition to the usual copy.

* * * * *

Copies of Title Page and Contents of Volume IV have been printed and will be sent to members by the Editor on application.

* * * * *

The Society possesses a number of books, a list of which will be found at the end of this *Journal*.

Members, resident in Great Britain, wishing to borrow books are requested to apply to the Editor, enclosing the necessary stamps for postage as shown in the right-hand column of the list.

* * * * *

The original edition of Captain Trinder's book "Dowsing" is now exhausted.

A reprint has been made, but it has been necessary to raise the price to 8s. for non-members and 6s. for members, postage at 4d. per copy being extra.

* * * * *

Mumetal rods for depthing have recently been supplied at £1 15s. each by The Telegraph Construction and Maintenance Company Ltd., through the Editor.

* * * * *

Messrs. Devine and Co. Ltd., of St. Stephen's Road, Old Ford, London, E.3, supply pendulums of whale ivory with central suspension and cavity for sample at 7s. 6d. each; also nickel-silver and copper angle rods, together with whalebone rods in desired dimensions of flat, square or circular section.

There is a frequent demand for back numbers of the *Journal*. The Editor would be greatly obliged if members who do not require their old *Journals* would return them to him. This applies especially to the last *Journal*, No. 33.

* * * * *

The Society's badges can be obtained from the Honorary Secretary at 1s. 3d. post free.

* * * * *

The Editor would be obliged if the member to whom the two books on "Earth Rays," by M. Cody, were lent would return them as soon as convenient.

* * * * *

Communications for the Editor, and inquiries, should be sent to Colonel A. H. Bell, York House, Portugal Street, London, W.C.2.

NEW MEMBERS

* Life Members

BIRD, T. C., Tenterden, Cromer Road, Holt, Norfolk.
BOLT, A. J., 7 St. Simon's Road, Southsea.
CARGILL, Lieut.-Colonel S. T., 14 Boxwell Road, Berkhamsted.
COLOGNE, H. E., West Down, Meopham, Kent.
EGGAR, Sir ARTHUR, Boscarn Hotel, Looe, Cornwall.
ESCOTT, Miss W. L., 15 Sydney Road, Leigh-on-Sea, Essex.
LUCY, H. M., 42 Wesley Street, Liverpool 8.
McKEOGH, Miss GRETTA, Etcharry, 43 Triangle Road, Haywards Heath, Sussex.

REJOINED

DERBYSHIRE, P. N., Rempstone Hall, near Loughborough, Leicester.
PONSONBY, Lieut.-Colonel R. G., Folieu, Mylor, near Falmouth, Cornwall.

CHANGES

BARBER, S. S., 47 Meadway, N.W.11.
BROWN, DONALD G., 15 Greenlaw Avenue, Paisley, Scotland.
*BOYER, Mrs. L. J., Estancia Alto Ongamira, Capilla del Monte, F.C.C.N.A., Argentine.
BRUNLER, c/o Barclays Bank, Bayswater, W.2.
BURLTON, R. FERRER, Wallend, Monkland, near Leominster, Hereford.
BURROWS, Mrs. H. J. Burrow Kot, Wraylands, Lustleigh, S. Devon.
*CASSINI, P., 160 Perry Road, Bandra, Bombay.
McCONNELL, J., c/o Mr. Dimsdale, 10 Holyoak Street, Prudhoe Station, Northumberland.
*MURARI, T., 8th Div. Troops Tpt. Coy., c/o Base Air Post Office, Basra, Iraq.
PARKER, A. M., St. Denys, 24 Yarborough Road, Grimsby.
POGSON, Major C. A., M.C., Flat 2, Cromwell Mansions, 1 The Drive, Hove 3.
SINGLEMAN, J., The Maisonette, Masson Avenue, S. Ruislip, Middlesex.
SHORTER, Captain H. H., 71 Highfield Gardens, N.W.11.
WETHERED, V. D., B.Sc., 39 Garrick Close, Walton-on-Thames, Surrey.

DOWSING PHENOMENA AND THE ELECTRICAL ASPECT

By J. R. PARKINGTON, A.M.Brit.I.R.E., A.M.I.E.E. (B.S.D.)

Of the several phases and stages of scientific development which I have seen and studied since I first became actively identified with electrical matters in the year 1897, none has impressed me so much with its complexity as Dowsing.

In saying this, I am, of course, not unmindful of the multitude of theories and explanations put forward in this *Journal* and elsewhere from time to time, which to many of our readers may appear both conflicting and confusing.

Nevertheless, these various ideas on the whole can, I consider, be regarded as a very healthy indication of legitimate aims in the direction of exploring many useful avenues, and have resulted in much good work having been accomplished by a large number of genuine seekers of truth all over the world.

In this outlook I see many parallels in the history of Electrical Engineering. Well do I remember the day when it was quite considered a "legpull" to assert that the new electric light needed no match or candle to light it! When the day came to use the light by those who could afford it, the terrible (?) potential difference of 100 volts was regarded with awe and not a little misgiving. In any case, a storage battery was in most instances regarded as being very essentially a part of the outfit as a second line of defence against breakdown and the then mysterious phenomena called "fusing."

But perhaps I am digressing, and to return to Dowsing. I feel that I must express some feeling of gratitude toward all those responsible for articles in this *Journal* since its inception, and by whose unselfish labours an exchange of ideas and a consensus of opinion has been made possible. Much pioneering has been accomplished, and I question whether the alleged 1,200 diviners said to be engaged by Hitler could do as good work as the *British* Society of Dowsers.

Nor must the splendid work of Messrs. Franklin and Maby in their laudable efforts to reduce dowsing phenomena to a more exact electrical science be overlooked, and I make no apology for mentioning their gallant endeavours, although possibly I may not fully agree with some of their findings.

With me the thing is, most of our readers must by now have become converted to the basic idea that dowsing *is* the result of electrical action. Here, then, at least, is fairly common ground.

As to whether the impressive adjectives used by some writers conveys very much, or the profound reasoning of Mr. Maby makes matters always clear. I must confess to having some doubts.

To some degree it seems to me that a certain standard of technical knowledge is sometimes presupposed which I am not sure all of our readers possess.

Hence in this article I propose to sacrifice what may be strict scientific accuracy in an effort to produce greater clarity. Being by profession an engineer, I hope I may be forgiven for thus keeping an eye on the main chance.

It has been stated, I believe, that in Britain the practice of Dowsing or "divining" (both poor words), and maybe "dabbling," has been known for at least 400 years. What has for so long been known seems to be a more or less simple practice enshrouded with a certain amount of mystery and regarded by quite a lot of folk as a special gift possessed only by certain (dare we say "chosen"?) people.

Although, as a manifestation or effect, the process of stick wobbling or ball swinging may appear quite simple, it is nevertheless a perfectly genuine phenomenon. Of this I am fully convinced, but the cause or what precisely gives rise to it is by no means so easy to define, nor explain.

Perhaps to enable a better understanding of the various phenomena which many of us are familiar with, I had better make some mention of what is sometimes termed "the structure of matter." To some, possibly, this may sound almost formidable, but in essence it approximately means merely the composition or "build-up" of the various and many substances we know and see existing around us.

In the chemistry lessons of the schooldays of some of us it may be recalled that we learned that an atom was the smallest fragment of an element (such as iron, copper, &c.) into which it could be resolved or divided. Later, we were told that the atom was no longer considered the final thing in division, but that this even might consist of a large number of restless and minute electric charges called electrons, neutrons, &c. Moreover, *all* substance or matter was made up of these little electric charges in varying proportion and degree of "restlessness," this latter feature giving rise to certain action which has become commonly known as "electrical radiation."

I do not propose to elaborate too much upon this latter, but would mention that like that used in broadcast radio, this radiation has frequency and wave length, differing with various substances, and possible to some degree of attunement.

I suggest it may be useful at this point for the reader to get some fairly clear conception of what is meant by such terms as "radiation," "frequency," "alternating current," "direct current," "polarity," &c.

Radiation may be described as the more or less continuous release of some of the energy contained in matter, producing in certain circumstances the so-called aether waves which actuate

our radio receivers. These waves may be from over a mile long, *i.e.*, from " crest " to " crest," down to a dimension corresponding to a very small fraction of an inch.

In dowsing it is more often than not that waves approaching this latter order are met with.

In passing, I hazard the suggestion that the sense of taste as well as the sense of smell may conceivably be quite unsuspected manifestations of electrical action attributable to some emanation or radiation proceeding from the object tasted or smelt.

Both senses are known to possess a highly sensitive nervous system acting in the role of a " detector," enabling one substance to be discriminated from another, and I am not aware of any better explanation of the functioning of the organs concerned. Certainly, it is doubtful if " chemical reaction " or " bacteriological effect " comprise the whole of the story in this connection.

To continue our study of the characteristics of electrical waves. When these waves are given off continuously with their crests occurring at regular intervals of time, the radiation or current as the case may be are said to have " frequency " or " periodicity."

These are comparable to vibrations or even rhythm in music, but are as a rule much faster (more per second)—in fact, may amount to millions per second.

In wireless broadcast and also in the distribution of electrical power by means of " the grid " the electrical energy transferred takes the form of what is known as " alternating current."

In both cases the alternating current is artificially produced, but the frequency through power cables now seldom exceeds 100 alternations per second.

Neither has much to do with dowsing, beyond the fact that it is extremely useful to be able to discover the exact whereabouts of a buried cable as I have done by means of the divining rod.

It may also be discovered by the same means whether such a cable is " alive " and, if the latter, whether the current passing through it be of the alternating or direct kind.

It may be claimed, however, that some knowledge of the behaviour of ordinary electric currents is definitely helpful to enable one to understand more clearly the possibilities of the dowsing " current."

Now in order to enable one to compare two or more things, or even to enable the size of one only to be better ascertained, it is necessary to adopt some zero or line of level. Try guessing the height of one or two teacups placed on the floor and afterwards on the mantelshelf and you will see what I mean.

In such an abstract thing as electricity the level taken is usually the electrical level or " potential " of the earth itself under normal conditions. To this all other potentials are referable, and in diagrams it is illustrated by a horizontal line. (See Fig. 1).

When the expression " alternating current " is used it should

be understood that such a current is not only alternately stronger and weaker, but that its plus or minus characteristic changes as well. This latter feature is termed its "polarity" or direction of flow, and it is hoped that the following diagram will make this clear.

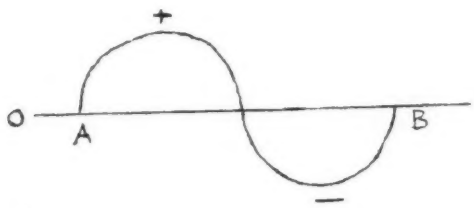


FIG. 1

Incidentally, the plus and minus waves shown from A to B together constitute what is known as "a period" or "a cycle."

By suitable apparatus, alternating current may be "rectified" or so altered that its waves become all plus or all minus ones. In this stage it thus becomes uniflow or has *one* direction of flow while still retaining its "wavey" form. Being now of single polarity always, it has become a varying direct current. This, "smoothed out" by suitable means so that its peaks and hollows practically disappear, produces a current which approximates very closely to that from a battery, which has no waves.

Figure 2 illustrates a cycle of current so rectified as to be of plus or "positive" polarity. There is some evidence that such a "wavey" current is found in the electricity of underground water streams. It is certain that both artificially produced and natural (water) electrification have identical reactions on the divining rod.

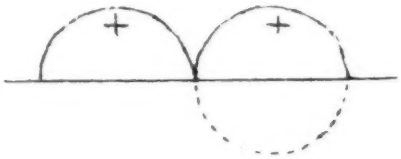


FIG. 2

A lesser-known form of fluctuating direct current is shown in Figure 3, which, when its wave-shape is regular, is sometimes assumed to be alternating current. Strictly speaking, it is not so, since its polarity never changes really. Something of this

kind of current is produced (but of much more irregular wave-shape) when the steady current normally flowing through a microphone is upset or "modulated."

It is important that this difference between *varying* Direct Current (D.C.) and Alternating Current (A.C.) should be clearly understood.

As we shall see later, *both* affect the divining rod, but in different ways.

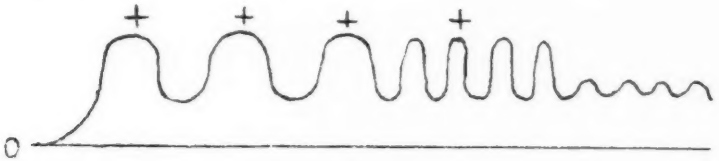


FIG. 3

The variety of electric currents differing either in wave-shape or frequency (or both) could be illustrated almost indefinitely. Those already indicated may be considered to be of basic or fundamental frequency. When this latter is very great (*i.e.*, being a large number per second) it may be used for what is termed a "carrier frequency" such as is actually used in broadcast. It is possible to modulate this frequency, as its peaks are so close together as to form almost a continuous line. Figure 4 gives the characteristic of a carrier, while Figure 4a gives some idea of what happens when a current of lower frequency is superimposed, as occurs when "speech current" is added during a broadcast.

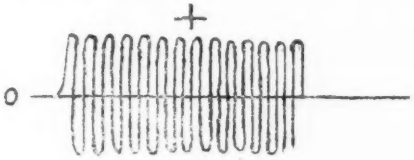


FIG. 4

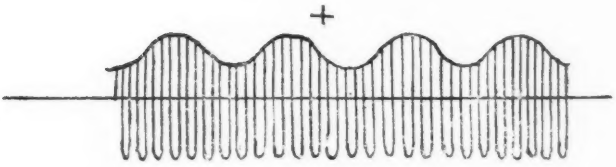


FIG. 4a

In certain circumstances it is not unlikely that similar conditions may exist in dowsing, local radiation from a particular substance being "carried" in some way upon waves of cosmic radiation.

It is more probable, however, that a "beat frequency" of low periodicity (produced by the union or heterodyning of two dissimilar frequencies) gives rise to the physiological effects in dowsing. By such beats of current, the muscular reflexes in the diviner (which actuate the rod) are produced.

I would here like to stress that it is now almost beyond question that it is muscular reflexes, however involuntary they may be, which produce the movements of the rod or pendulum, and *not* any magic property of these latter, as some might wish us to believe.

As the result of some study of the physiological effects of various forms of electrical energy applied to the human body, I firmly believe that in practically every instance the cause of the reflexes already referred to is traceable to the low beat frequencies above mentioned.

On the other hand, it has been stated on good authority that high frequency current of the order of several thousand volts may be administered without producing shock or any muscular reflexes.

It has been found, however, that currents of moderate or low frequency reproduce the dowsing phenomena. Possibly some people cannot dowse because their nervous system is not attunable to frequencies within the usual dowsing range.

Probably the reader does not find my description of a "beat frequency" thus far very clear, in which case Figure 5 may help.

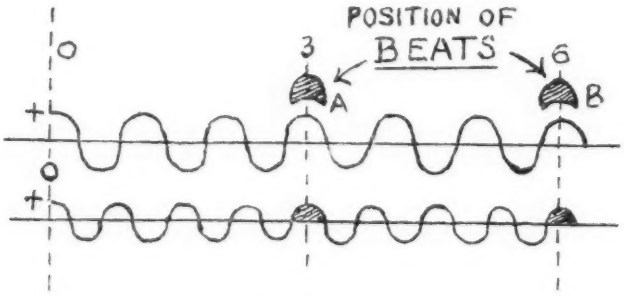


FIG. 5

As to what constitutes a beat frequency and how it is brought about I will endeavour to make more clear, this being of some importance also.

Roughly speaking it is produced as the result of combining two distinctly differing frequencies in a certain way. For instance, if you can imagine, say, a frequency of 3 cycles per second starting with its positive peak of wave at the same time as one of 4 cycles per second, then obviously the peaks of these two will not coincide except at the 3rd and 6th peak. At points 3 and 6, therefore, the power of each wave becomes most "additive" and produces a combined effort called a "beat." This is by no means an orthodox explanation, but may be the easiest to comprehend. Very much higher frequencies are, of course, the more usual.

In the human body its own or natural frequency is produced, differing in wave length with different people, but probably round about that of water itself, of which the body contains approximately 75 per cent. This human body frequency by "phasing-in" more or less effectively with a radiation coming from the substance divined results in a beat frequency of a lower number per second by the process I have already explained.

In passing, I would like to suggest that one reason why the rod dips with some dowsers and lifts with others when crossing an underground stream may be due to how the "phasing-in" takes place.

My own experience is that it dips in such circumstances no matter how the forked twig is held. Figure 5 roughly illustrates the beat frequency process, the "beats" at A and B being obviously of "double strength" and occurring at much greater intervals of *time* than the frequencies of which they are derived.

Of all objects divined or dowsed, water seems to be the most necessary and popular. Doubtless it has special features, some of which I have already briefly alluded to. The fact that the rod lifts when one walks in the upstream direction and falls when walking downstream is to me very significant. Similar action takes place when walks along and over a direct current cable are taken. This action is more definite when the "live" cable carries current with at least some trace of ripple in it, such as that from a rectifier or a D.C. dynamo.

It seems to me, therefore, that a water stream must possess *polarity*, a view which experiments I have made strongly confirm. As might be expected on similar reasoning, an alternating current cable gives no such result, due to its polarity changing too rapidly to be followed by any dowsing muscular reflex. This again with me happens, and I get no dip or rise when walking along and over in *either* direction. By crossing and re-crossing in various places I am, however, able to find the "run" of such a cable and at the same time distinguish it from a stream or one carrying D.C. Regarding this latter, in the case of fissure streams passing through channels in shale rock I have by means of a certain device actually measured the "telluric" current available between two points not very far apart.

In many parts of South Wales, where I have lived for some years, streams passing through fissures in shale I have become fairly familiar with.

Shale of itself is a fairly good insulator, and it is not surprising, therefore, to find fissure streams in it more highly electrically charged than those which are traceable in a water table (or underground lake) such as one finds in parts of East Anglia. Due to this high degree of electrification, I have found that such fissure streams sometimes produce a "pull" on the rod, tending to give the impression that a much greater volume of water exists than what really obtains, and I would warn those about to excavate of this. In this connection I have found a careful check-up with the depthing rod, angle rods, and sometimes the pendulum, of the greatest value. Fissure-stream excavation in shale is not always a cheap job, and it is always a wise procedure to try out against known sample of drinkable water by means of the pendulum before sinking a well, to ascertain if the water after all may not be either too polluted or even mineralized to be palatable.

In many districts shale is found only lightly covered by a layer of porous earth or a poor kind of clay, whilst the rock itself may extend right down to above and below the coal seams. Obviously, in many such cases the rainfall water would get little natural filtration from the surface to the point where it enters a fissure stream and may thus cause pollution. Nature has provided for this contingency in a somewhat curious way.

By the weathering of silicates which pass into solution and ultimately solidify as amorphous quartz it may often be found that the upper part of fissures in certain areas have become thus "sealed" for considerable lengths of their run. This quartz is of a distinctive pinkish-white colour and can be frequently seen in the shale rocks which form a large part of the cliffs of the Welsh coast.

Large lumps of it are largely used for rock gardens, &c., in which it is of considerably artistic value.

I had hoped to have given some details of experiments and some queer experiences, but as I am afraid this article may have already reached too great a length, what I have not included may form the subject matter of some future contribution.

COLOUR AND DOWSING

By T. BEDFORD FRANKLIN, M.A., F.R.S.E.

So many dowsers find that the use of coloured samples helps them in their work that it is interesting to see if science can throw any light on this phenomenon.

The quality of light we call colour depends on the wave-length of the light, and these wave lengths of the various colours are in Angstrom Units (10^{-8}cms.) as follows :—

Red	7700—6470
Orange ...	6470—5880
Yellow ...	5880—5500
Green	5500—4920
Blue	4920—4550
Violet	4550—3600

These are the ranges of wave-length between which lie the colours of the spectrum when light is analysed through a prism.

The nature of light is completely specified as far as science is concerned when we know its wave-length and intensity.

But when we come to our colour sensations things are not by any means so clear cut ; for these we have to consider the variations in the reactions of the eye and brain as well.

Let us suppose that by means of a strong light, a narrow slit, a lens and a prism, we throw a spectrum on a screen. If we interpose a red glass in front of the slit all the spectrum disappears except the red—there has been complete destruction of all the other colours. Now try a yellow glass in front of the slit and by analogy we should expect all the spectrum but yellow to disappear. But this does not happen ; only the extreme blue disappears and to a casual observer the spectrum remains much the same as before.

Yellow is obviously not a pure colour, for the light transmitted by a yellow glass is made up of a great variety of wave-lengths ; in fact, the prism and the eye do not give the same standard of purity.

Again, if we superimpose a blue glass and a yellow glass in front of the slit, then since the blue glass destroys the red and the yellow glass destroys the blue we shall be left with the middle of the spectrum only, which is green.

But if we superimpose the lights from two slits on the screen, one slit having a blue glass in front of it and the other slit a yellow glass, then since the yellow glass destroys the blue but the blue glass re-supplies the blue, the light on the screen will be white.

And this white may be used to show the great tolerance of the eye as regards purity of colour ; for the white of daylight, electric light, and a paraffin lamp are different enough to surprise anyone who has not done the experiment of viewing them side by side. When this is done the paraffin lamp " white " is now seen to be quite brown, though a moment ago the eye was pre-

pared to call it white until it had something with which to compare it.

Enough has been said to show that the eye measures wave-lengths very inefficiently; a pure yellow of one wave-length only cannot be distinguished by eye from the yellow which is made up of every wave-length except blue. A good deal has been written from the dowsing point of view on the analogy between colour and the octave of sound waves; there is no such analogy, for although the ear can resolve a chord into its separate notes—or wave-lengths of sound—the eye, as we have seen, is incapable of resolving a chord of colour such as yellow into wave-lengths of light in the same way.

Our ears contain resonators which respond only to sounds within a very narrow band of wave-lengths; the eye has only three resonators which cannot be sharply tuned to such a narrow band of wave-lengths. In fact, all three resonators really respond to the greater part of the spectrum, though responding best to the red in one case, the green in the second and the blue in the third. Our sensation of colour depends on the relative amount each of these three resonators is excited by the colour in question, and if any of the three responses are feeble or missing then we are said to be colour blind, and in colour-blind people it is the red and green resonators which are most commonly at fault. *Since every wave-length can excite all three resonators, a required colour can be produced by the use of almost any three wave-lengths so long as their relative intensities are in correct adjustment.* This hypothesis of only three resonators in the eye can be shown to be reasonable by photography; for ordinary photographic film does not respond to red and green light and so is colour-blind just as a person who lacks the red and green resonators. Orthochromatic film responds to green and not to red, while panchromatic film is sensitive to all colours just as the person with normal colour vision.

If, therefore, we take a set of photographs with suitable films and filters we can obtain a photographic representation of what people see who have perfect vision or almost any required degree of colour-blindness.

I have used a set of these photographs alongside the original object as a test for colour-blindness for many years. If there is a complete red-green colour blindness it is always the photograph taken with the ordinary film which is chosen as the best representation of the object, while a normal person always chooses that taken with the panchromatic film and green filter.

If we interpose a solution of chlorophyll in a glass cell in front of our light and view the spectrum we find that the red end—except for a narrow band in the deep red—is practically destroyed. The chlorophyll molecule absorbs the red wave-lengths and so takes up energy which it uses to form starches and sugars.

Hence, due to the resonance of the chlorophyll molecule to certain wave-lengths, not only do we have the green of the world's vegetation but coal and oil and the energy we absorb when we eat green plants or the animals who feed on them. As haemoglobin has similar properties it may be that colour affects a dowser by the resonant response of his haemoglobin to certain wave-lengths in the spectrum. It is also possible that the wave-length associated with a pure colour may put a dowser into resonance with the wave-length of the radiation from a specific object.

But—and it is a very large but—in view of the fact that so many colours are associated with so wide a band of wave-lengths and that so many dowsers must, by virtue of their varying degrees of colour-blindness, be totally unresponsive to many wave-lengths, it must be expected that an "individual factor" will appear, and one cannot expect that the response of all dowsers to colour samples will be universally constant.

Also a colour like yellow should act as a sample for almost anything since it can contain every wave-length except blue. The wave-lengths of the radiations from the elements have been found to be specific and only cover a very narrow band; the wave-lengths associated with the various colours are spread over a wide range; and so science appears to give a very decided negative to the idea that a single colour, by virtue of its wave-length, can put a dowser into resonance with the specific wave-length of an element.

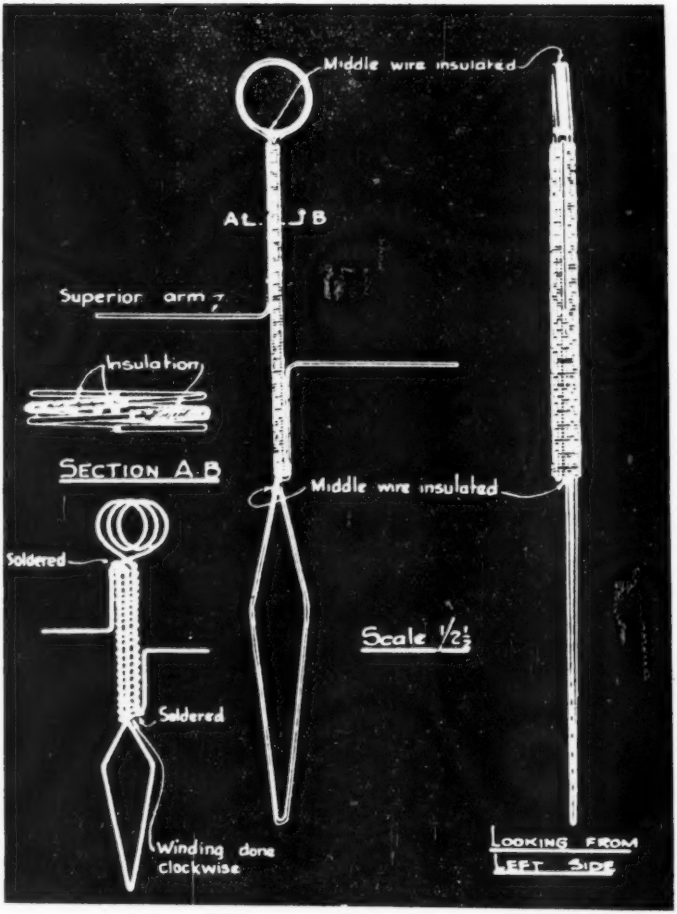
A MODIFIED POGSON MOTORSCOPE

BY D. O KING

An opportunity recently occurred of examining a motorscope in use by a local dowser for finding water. (See sketch).

A number of these, made of copper, bronze, iron and aluminium with a varying number of windings of fine copper wire, have since been tried out, and the conclusion was arrived at that it might be convenient to construct a special motorscope for every substance sought for. In any case, it is imperative that perfect balance be shewn when the motorscope is suspended at the middle point between the arms.

It can be held and employed in a similar manner to the Pogson motorscope, but when working for serial numbers I find that quicker results are obtained if the motorscope is held with the point straight downward at arm's length and close to the body. In this case, while standing motionless, the point lifts inwards towards the body to approximately 90 degrees, slowly returning to the vertical, and finally rises outwards from the body, after


Middle wire insulated
AL. J B
Superior arm
Insulation
SECTION A.B
Middle wire insulated
Soldered
Scale 1/2
Soldered
Winding done clockwise
LOOKING FROM LEFT SIDE

which it becomes inert. The same movement takes place whether working over positive or negative substances. Admitted that a different movement might take place with other persons, such as a lift outwards from the body, or revolutions; but these I have never obtained even with the Pogson motorscope.

Now, if one hand is withdrawn after this "preliminary" movement (which is not counted) and the motorscope regrasped, the point will lift a number of times before it goes dead, provided that the hold is retained. This is the serial number. Thus for copper, as suggested in a previous communication, a pattern of four serial numbers, 5, 4, 3 and 2, depending on the position taken up by the dowser with regard to the ore body, is found. The exact procedure by which the above pattern and, as a matter of fact, a pattern for water and many other minerals have been worked out is printed below.

Depth.—If the hold is retained from the moment of first grasping the motorscope it will lift continuously as stated by Mrs. Pogson. In my case, however, each lift represents one metre of depth, nor is there any need to walk about or wave the arms in order to get results.

I also find the motorscope to be useful as a check on work carried out with a forked rod, inasmuch as reaction received with the latter can be checked with a motorscope as follows: If one lift is obtained when passing over an ore body and the fork is changed for a motorscope this will register the serial number of the ore body in any other spot and even some hours later. If the motorscope does not move, then the original lift of the rod was not a genuine one. Reactions are also obtained if the closed fork is held in both hands or by merely clasping both hands behind the back when walking about within an area of influence. The lessons to be learned from the above are, therefore, always complete a series, and do not walk about over water with the hands clasped or holding the rod in both hands if at all allergic to water.

Delineation of Emanations from a Copper Disc by means of a Modified Pogson Motorscope

In a previous communication the suggestion has been made that the "serial number" of a substance such as a metal or water does not necessarily consist of a single cypher, but that the number may vary according to the position taken up by the Dowser with regard to the substance. For instance, if the following procedure is strictly carried out with the modified Pogson Motorscope, shown in the sketch, it will be found that it is possible to obtain four different serial numbers, when examining a copper disc, or, as a matter of fact, any of the common metals, except that in some cases two or more similar numbers do occur in one pattern, *e.g.*, that of tin. Several of these patterns have

been checked independently by another person and found to correspond.

Procedure	*Observations*
1. Mark on the floor of a room a cross drawn to the four cardinal points.	Unless the operator suffers from "inhibitions," it is quite feasible to work with a copper motorscope, nor is it necessary to select a neutral spot, or arrange for good dowsing conditions.
2. Mark a similar cross on the floor in another place.	
3. Get *someone else* to place a single copper disc of any conveniently small diameter and thickness on the intersection of one cross, and do not approach or touch it until at least 10 minutes have passed.	It takes from 6 to 8 minutes for the copper disc to settle down to a definite "whirl," whether placed on its "base," or not.
4. Meanwhile, get rid of the remnants of any previous dowsing operation by proceeding as follows: — Approach the cross, which does not contain the copper disc, with the motorscope held by *one hand only*, stand motionless; grasp the motorscope with the other hand and take a *single* step diagonally into, say, the S.W. quadrant. A number of lifts may occur, provided that one hand is withdrawn from the motorscope and replaced after the first, or "preliminary" lift, as explained in a previous article. Having completed the series, if any, remove one hand and walk away to return to step into the adjoining quadrant, which on completion of the remainder will have resulted in a counter-clockwise march. Repeat in a clockwise direction.	The lifts of the motorscope do not correspond to any underground substances which may be present, provided that attention is focussed on the object to be achieved.

5. Approach the copper disc with one hand off the motorscope; stand motionless; grasp the motorscope with both hands and step diagonally into any quadrant. Any one serial number, usually 5, of the pattern 5, 4, 3, 2 will be registered.

If the motorscope is grasped after stepping into the quadrant, it will be necessary to wait for the "period of activity," as noted by Mr. Capes. Vol. III., No. 21.

6. Remove one hand from the motorscope, walk to the auxiliary cross, stop, re-grasp the motorscope and step into the quadrant corresponding to that recently left.

A serial number similar to that just registered will occur.

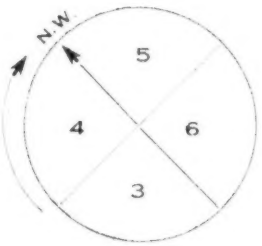
The act of moving when holding the motorscope apparently "changes the body" and an immediate lift is obtained, which suggests that "periodic pause in activity" is not inherent in the metal.

This repeat action has no reference to the Pogson technique for depthing, since an entirely different procedure has been adopted, *i.e.*, removal of one hand and its replacement on the motorscope after the first preliminary movement. Further, it repeats only once, and irrespective of the distance of the hands from the body. Nor is the existence of such a duplicate, or "memory" to be wondered at considering that we find nothing strange in being able to remember impressions received through the other five senses. Hence it appears that if this repeat action is not completed before another quadrant is entered, a similar series, say 5, will be obtained, followed by 5 in the remaining quadrant, due to auto-suggestion.

7. Approach the disc again, step into the adjoining quadrant (counter clockwise direction); mark out the serial number on the other cross, as before, and follow round the remaining quadrants until all four numbers of the serial pattern, 5, 4, 3, 2 have been found.

No quadrant should be entered a second time until the round has been completed.

In a similar manner patterns for other metals can be found, but it should be borne in mind that the pattern for silver, for example, will not be found within the quadrants, unless the cross is set out thus —



It would be interesting to know what pattern, if any, corresponds to a dowser whose serial number for silver is 7.

A peculiar effect will be noticed if operations are carried on continuously for a certain period, in that reactions become gradually inconsistent, followed by a period of from 6 to 8 minutes, during which time the hands are thrown about in an extraordinary manner if the motorscope is held firmly, and not allowed to rise. This period of chaos suddenly changes to calm, when it will be found that the whole pattern has swung round to another position with always the number 5 replaced by a 2 or vice versa. Further, on going over to the auxiliary cross in order to register the "duplicate," both numbers will be given, *i.e.*, the original and the new. This swing round occurs regularly every 45 to 55 minutes for copper.

THE PHYSICS OF HEALING BY HUMAN RADIATION

BY MRS. KINGSLEY TARPEY

During the past half-century there has been serious investigation into the nature and origin of human radiation by groups of scientists, medical and physicist, in France, but not, so far as I am aware, as yet in England. Dr. Dudley Wright, who is the pioneer in this work, is, unhappily, a prisoner of war in Germany, and while other doctors are becoming interested none of them are inclined for serious research. There are signs, however, that physicists are more alert. I have promised my help to several among the younger generation when time can be spared

from work in Government laboratories. They tell me there are various tests in chemistry and physics, as well as photography, that might go far to establish the nature of the emanation. Some of these were employed, I think, by Dr. Crawford in the Goligher Circle.

A suggestion has been made, I am not sure if it originated with Georges Lakhovsky, that the origin of the force is the Cosmic Ray. The healer acts as a receiver and transmitter, perhaps even as a transformer, and the elements in the ray that might be maleficient are thus eliminated. This theory appealed to my ignorance as plausible: it is comfortable to have a working hypothesis, and though it seemed to be impossible to get any authoritative statement about cosmic rays there has been so much "science made easy" of late years that one felt quite at home with them! It was only when I began to follow up the discoveries about measurable radiations from pictures that I found it would not hold water at all.

In my notes published in the December issue of the *Journal* I made a brief reference to the work done in regard to pictures by two members of the Society.

On the Bovis Biometre two measurements can be recorded from the human subject: the tip of the right thumb gives the physical wave-length, the ball of the right thumb gives the psychical. The physical average is between 120° and 140° Bovis. The psychical 30° or 40° higher. This measurement can also be taken from an outline of the thumb drawn on paper.

1 degree Bovis equals 65 angstroms.

When the psychical measurement is very much higher than the average (I have measured three members of the Society within the last few weeks who came out between 300° and 350°) one may expect to find, in addition to the dowsing faculty, rare qualities of intuition and great sensitivity; there should also be appreciation of the Arts, and high ethical and moral standards. Possibly balance may be lacking. When the psychic measurement falls much below the physical there may be mental trouble; this does not of necessity mean mental deficiency or dementia, it may result from worry or ill health, or even bad headache. All mental defectives in a mental hospital in France were found to have a psychic measurement much below 100° B. according to Lakhovsky. On the other hand, I have a record of a case of advanced senile decay with complete loss of memory in which the psychic measurement was over 200° B. In that case the subject's appreciation of music, which had been a marked characteristic, was unimpaired.

A correspondent of mine last September reported that she had tried the experiment of putting two of my letters inside her stockings over her knees, and that she thought there was some improvement in her arthritis. This seemed to be a clear case of auto-suggestion, but I set about testing my own and other

people's letters, and whenever possible comparing letter measurements with thumb prints. I found they corresponded closely. I had been for some time magnetizing oil and wool for curative purposes, and water for use with plants, and I find I can raise the wave-length of these from an average of 100° Bovis to 350°. My handwriting had the same or nearly the same measurement; there was a slight variation in some of the samples, a shopping list gave a lower record than a letter to a friend.

The wave-length of my pictures (which is quite another matter than the pendulum signature mentioned in my previous notes) varies a good deal. A few dabs of paint on a wood panel have the same wave-length as treated oil and wool, whereas more serious work gives the same psychic measurement as the ball of the painter's thumb. In the case of a man I tested lately, a water-colour drawing was 5° B. higher than the wave-length of the ball of the artist's thumb.

The psychic wave-length of the healer is relatively high, and comes near to the radiation record of works of art that we call "great." If the wave-length of 450° to 500° is a healing ray, then pictures painted by an artist who is also a healer may actually themselve radiate healing. On this assumption I started out to make experiments, with, unfortunately, a minimum of available material. First, I had to have subjects who had some appreciation of art; secondly, they had to like *my* work; thirdly, they had to have intelligence enough to be willing to submit to the test; fourthly, I had to guard against suggestion and auto-suggestion. In spite of all these handicaps, I have been able to collect enough material to justify the belief that the matter is worthy of the notice of scientists.

"Twisted Glass."

The emotional reactions some people feel to beauty in Art has been described as "centipedes down the spine." Someone —was it Charles Lamb?—divided the world into those people who experienced this thrill and those who did not. A highly gifted painter of flowers, Rose Magnus, had an elusive and imaginative name for the quality in pictures which produces this sensation. As a very small child she had gone into an ecstasy of delight on seeing a beautiful piece of Venetian glass when she came down to dessert one evening. No allurements of fruit or bonbons could divert her attention from it, nor was the memory of its charm ever after dimmed. The highest praise she could give to a work of Art was "twisted glass." She was a fine, unerring critic, and those of her fellow artists who had the privilege of her friendship knew when they showed work to her that if she said "twisted glass" it was the *ne plus ultra* of praise.

It might be argued that the curative power of any picture resides in the capacity of the patient to experience this special

emotion; and I will admit at once that the effect of healing by radiation from pictures is very greatly enhanced where there is a strong aesthetic reaction. I always impress upon the patient the importance in all treatments of the mental image. It is possible that fixing the mind on a picture before treatment may act as suggestion, but in the test cases I have been careful not to give any clue as to the effect the picture might be supposed to have. I have also been at pains to get some examples of subjects who could never understand the meaning of "twisted glass," and who have no appreciation of pictures: people who would be surprised if they were asked to look at any picture for more than two or three minutes, and who would be frankly bored if they were asked to sit in contemplation of one for ten minutes. The truth is that moving pictures have destroyed the capacity of many people for the enjoyment of the static. Even in these cases the vibrations in the thumb test have gone up by 75° in seven or eight minutes while sitting in front of a picture.

RECORDS OF PHYSICAL DEGREES BEFORE AND AFTER TREATMENT.

	Before treatment	*After Picture treatment*	*After contact treatment*
Mrs. T. ...	125° Bovis	8min.—160°	20min.—250°
Mrs. W. ...	125° ..	10 ,, —225°	30 .. —350°
Mrs. D.V....	125° ..	8 ,, —230°	20 ,, —300°
Mr. C.D. ...	135° ..	9 ,, —200°	20 .. —350°
Miss O.M....	135° ..	7 .. —250°	10 .. —300°
Mrs. H.E....	140° ..	8 .. —265°	5 .. —350°

After making these records I reflected that some four or five dowsers, after my first address in 1938, had told me they had been able to perceive my radiations the width of the room away; to test the effect of "absent treatment" I began a new series of records at the patients' own homes. Thumb prints were to be taken b fore and after sittings of ten minutes each. In the first case the patient records on the card "comforting," "very soothing," "almost asleep," and her comment on the series is: "Not such a marked feeling of well-being as with you, but strong tendency to sleep." The rate of vibrations rose uniformly from 125° to 250°,

The second case reports relief of pain and numbness of hands. The rise registered is 100°. It is one of the cases in which I did not expect any æsthetic reaction.

The third is the most noteworthy of them all. These patients are all over seven'y-five, and this last one has been a sufferer from pernicious anæmia for four years. In a former article I gave some details of a short course of treatment during which there was marked improvement. This patient came back to me after a long voyage, which had improved her general health.

but she still had to depend on regular injections of liver extract. I give some passages from her diary.

"*December 1st.*—Resumed treatment after an interval of more than a year. The immediate effect of Mrs. T.'s magnetism sent me away physically renewed.

"*December 7th.*—In spite of very bad weather I have got through an immense amount of work. . . . I am conscious that a new zest for life is due to Monday's treatment—or should I rather say the hopefulness that emanates from Mrs. Tarpey.

"*December 8th.*—After the best night I have had for years (my nights are always to be dreaded) to Mrs. T. at 3 p.m. A long inspiriting two hours with her, so calmative and healthful. . . . She magnetizes my ankles with good effect, though when she holds my hands the flood of warmth, life renewed, reaches down to my 'marble' ankles and feet. That night I slept from 11.30 to 7 a.m., a thing I've never done as far back as ever I can remember.

"*December 21st.*—This has been a remarkable week. In spite of weather, the lack of 'comforts' that I have enioyed in my own home for years I have never felt so well or happy for many years over so long a period.

"To-day I helped to entertain 150 aliens at our Meeting House, and I hope I radiated some of my well-being to these poor refugees.

"*December 23rd.*—Having been lent one of Mrs. Tarpey's oil paintings I feel that her healing influence is all about me.

"*December 24th.*—How amazing it seems to have these continuous nights of sleep untroubled with the tragic and teaming dreams that have pursued me unremittingly ever since childhood! A feature of these was that they stayed with me all day distressingly. Now even when dreaming I am 'entertained' rather than scared and defeated! Moreover, they go out of mind.

"*December 28th.*—People tell me that I look 'different' and so well! That is how I feel.

"*December 29th, 30th, 31st.*—Since I came under Mrs. T.'s influence I no longer experience the descents into fatigue and depression that have been customary for three or more years.

"*January 5th, 1942.*—After two hours of Mrs. T.'s company amid her pictures and healing influences, am almost moved to burst into song, like the birds!

"*January 9th-11th.*—All this week I have pursued a course of usefulness as well as National Gallery concerts and lectures without detriment—feeling it hardly necessary to record further the steady improvement which goes on."

This is one of the chronic cases of old standing where there must be a stiff fight to overcome bad conditions. It is impossible for me to give daily treatments except in acute cases, and this interim treatment by pictures, or by magnetized wool and oil

gives very good results. The rise in the rate of vibrations was from 125° to 225° Bovis twice daily. In suitable cases I can lend a picture, or a series of pictures, and watch the variations of the rate of vibrations by thumb prints taken by the nurse in charge of the case. I have been very sorry hitherto to have to refuse to take cases that involve travelling, and I welcome the prospect of a wider area of usefulness.

Physics—or Beyond Physics?

I must now confess to being somewhat disingenuous in my title to this article. I hoped by it that I might entrap some physicists into reading it and bending their minds to the question *is* this a physical force, or is it indeed something outside physics in that extra dimension we call psychic? There is a physical element, it would seem, that can be communicated to paintings, and wool, and oil; that pervades my house, and permeates my clothes, and that does not even "come out in the wash." This is something that any Dowser can measure for himself. But there is another element that depends on good will; that is rooted in the love of humanity. I have read in the *Journal* some time ago, I cannot trace it at the moment, of a case in which a healer who was staying with a missionary discovered that a native patient was a really bad man, and felt that the virtue had gone out of him in regard to that case. I have had a somewhat similar experience myself. I was treating a patient for an internal illness in the hope of avoiding an operation. She was young, pretty, attractive, and had every natural advantage. She was suddenly revealed to me as petty, mean and selfish. I thought I should have to give up the case, for it seemed as if our rapport had been destroyed. But after a struggle I was able to transfer my hatred from the person to the quality, and to feel only pity for the victim of such ugly traits. There was an exploratory operation and the surgeon did not have to remove the diseased organ. But I am sure the poor young woman poisoned herself all the time by her unhappy feelings. Perhaps there may be in the cosmos some universal fount of healing which we can draw upon for ourselves if our minds and instincts are healthy, and which the healer can draw upon more abundantly so that he can pass it on to others.

In conclusion, may I say that I shall be very glad to submit to any tests that meet with the approval of Colonel Bell, and that can be carried out without involving fatiguing journeys and that do not unduly interfere with my work. I am particularly anxious to leave some records that may be helpful to other healers and to younger generations.

THE ART OF DIVINING FOR WATER AND METALS

A Study of the Work of Mr. John Timms

This article, reproduced by permission of the Editor of Psychic Science, *from the number for April, 1924, was written by the then Editor, Mr. Frederick Bligh Bond.*

Members will realise that certain points dealt with have been elucidated and amplified by recent investigation.

The art of water divining seems to be a very ancient one, and perhaps no period of history has been without some manifestation of this gift: but only of quite recent years has it begun to claim serious attention and to assume the status of a science. It may be claimed to have a psychical as well as a physical aspect, for the faculty seems in some cases to be applied with psychical powers, *e.g.*, healing or the diagnosis of disease. The nature of the forces employed are also at present obscure. Therefore it is well within the range of psychical investigation and may rightly find a place in our columns. It has been difficult to convince men of learning that there was really anything in the claims of the diviner worthy of examination, and much useless discussion still takes place as to whether the power claimed by the dowser is genuine; but the great accumulation of evidence pointing to the practical utility of the art and the reliability of the powers possessed by many practising it, seem to have turned the scale in favour of serious attention on the part of science, for large numbers of people of every class in need of water supplies are now reaping the benefit of the power in widely scattered localities.

The faculty of the water finder is not widely distributed, and perhaps about one person in a thousand may exhibit the gift in some degree. Its comparative rareness has no doubt been the chief reason why the subject has been commonly regarded as a superstition. It is difficult for many to accept anything they cannot personally verify. Another cause of doubt has been the confusion due to the work of amateur experimenters who, having no system, have often brought their claims into ridicule. It sometimes happens that one person among a party witnessing the work of a water diviner may find that on using the rod himself he will obtain some reaction, and forthwith he will attempt to instruct others without having applied any stringent tests as to his own ability, and the conditions under which it is exercised. The results, as may be easily understood, are too often failures. The subject of our study is the work of Mr. J. Timms, who may be regarded as one of the leading experts in the art. He tells me that he is often called upon to rectify in the course of a single year as many as twenty to thirty sites given incorrectly by amateurs in various ways. He would

emphasize the point that for substantial success in the practice of water or metal divining a long course of educative work is necessary. I would add that in each individual case the personal equation must be taken into account, as the gift will be found to vary with each one in its own manifestation.

I will now give in Mr. Timms' own words a brief sketch of his own experience.

Before discovering that he was himself the possessor of the faculty in question, he had read several articles dealing with the subject, but had found nothing to carry conviction as to the reality of the faculty as a living force, and he felt some little bias against it. Then hearing of an amateur diviner who had been successful in his district, he, with a friend, cut two pronged sticks from a hedge and attempted to use them in what they considered the proper way. Having walked the length of a field without result they tried again across the end of it, and just as they were about to throw away their rods, to their astonishment the rod held by Mr. Timms begun to turn in his hand. Resistance only caused it to turn more freely. Carefully noting the spot and the apparent direction of the water, the stream was again located on their return by a different road. Then, returning to the estate, the gardener invited him to locate the stream supplying his well. This was soon done, and on request a further location in a field was given. The gardener then stated that the stream had been known at that point forty years before, certain stones which marked the spot having been placed there for possible future use in tapping the stream. Thus he found that in less than an hour he had made three accurate locations. This determined him to start a course of self-training, which commenced thirteen years ago, and as he tells me is even now not complete as he is constantly learning.

I will now give a short description of the actual working of the rod. First of all he would point out that the power does not lie in the rod itself. It is only the indicator. The faculty, he says, resides with the diviner, the rod merely bringing the actions of the force within the range of muscular resistance, thus rendering it amenable to some form of measurement, otherwise the diviner would have to rely wholly on his own sensations, which would be more or less vague. For practical purposes there is nothing better than the forked hazel prong, which is strong and pliable, yet very sensitive in the hands. But a prong of any other sort of wood, or even a piece of iron bent to the same shape, he finds will give results, and he has used them with success. I have myself seen him use a fork of bamboo; but the hazel prong, whose use has been sanctioned by centuries of tradition, is still the best rod. Mr. Timms finds that with him it may not be freshly cut. In fact, the wood may be dry wood. This seems different from the usual belief. Only last year I came across a very powerful diviner in a village in Hertfordshire, who told me

that he found it necessary to use a freshly cut twig, and that in his opinion only two or three kinds of wood were suitable, *viz.*: hazel, wych-elm, and one other; but with Mr. Timms the power takes no account of these conditions. Even a straight piece of tin run into a narrow bar, like a bar of solder, with its square ends held firmly in the hands will twist itself up into the shape of a divining rod, and turn over freely. When released, the formerly straight strip will be seen to be twisted at each end, and have a bow in the middle. This phenomenon, with other demonstrations, was filmed by the Gaumont Film Company in quick and slow motion, and has been demonstrated by Mr. Timms at his lectures at the College, in Birmingham and elsewhere. This, however, is only demonstrative work. For practical purposes he asks for a good $\frac{1}{8}$in. thickness in hazel prong.

And now he would describe the educative method which he has evolved. Satisfied of the reality of the power displayed, which in his case is sufficient to lift a man or woman lighter than himself off his or her feet if he or she attempt to hold down his wrists when over some object of divination, he then set about the task of learning how to measure the approximate volume of the flow of water in brooks, ditches and arms of the river. It did not take him long to discover that over stagnant water there was no action at all, but the more the water passing a given point the stronger would be the action. Walking being his chief recreation, a rod now always accompanied him, or would be cut from the nearest hedge; the result being that underground water was discovered by him at scores of points, all of which eventually became embraced in a larger mapping scheme hereinafter described. But now he made a most interesting discovery. He found that certain metals also caused an action of his rod, similar to that produced by running water. The metals chiefly causing this reaction were nickel, gold, silver and copper or bronze. Strangely enough, iron or steel seem to have no reaction whatever. This is certainly contrary to what one might easily have supposed in view of its magnetic nature. It is no doubt a fortunate circumstance that this is so, because iron objects being so universally found, their attractions would be manifest in almost every direction, and I should think would often effectually obscure the consciousness of direction in the attraction of other metals. His new discovery first led him to a theory of some subconscious action of his own mind. Various minor tests were made to prove or disprove this theory. Laboratory tests were instituted, all articles tested being covered with a cloth, and a variety of objects of non-attractive nature, such as match box, ink bottle, &c., being interspersed with the metals.

Under these conditions it was found that the strongest "pull" of the rod took place over nickel. Next came gold, then silver, and lastly copper or bronze. The recent change in the alloy used

in our silver coinage caused him to experiment on the effect of the nickel in the composition. He found that the new coinage gave him twice the pull of the older ones. This was reported at the time in the Paris *Daily Mail* and other papers. At this period he began to practise the location of sites for friends and acquaintances—obtaining excellent results: though he realised that he had not yet sufficient knowledge and experience to enable him to adopt the role of a professional diviner. There were problems which he had not solved.

A difficulty experienced in locating a sovereign hidden in the grass of a lawn led to a very important discovery in divining, which he terms "counter-attraction." This may be explained as follows: Take three half-crowns, place them together, and a good moderate "pull" ensues. Now moving to the right of the coins, the left-hand being now nearest to them, hold the rod firmly in the left hand and just touch the palm of the right with the end of the other fork of the twig, and the rod will immediately turn over. Now reverse the grip of the right hand and let the left prong touch the palm of the left hand. In this position there is no result, but by crossing to the left side of the coins, still maintaining the right hand grip, the rod again turns, whilst by reversing the grip to the left hand again the movement will be neutralized. Now place the three coins in position a little way apart, leaving one in a central position, and having the others a few feet distant on each side. Try the rod over the coin in the centre. The "pull" is modified in a curious way, for the right and left coins having a "pull" about equal to the central "pull," the rod will move sufficiently to lock the muscles, but it will not turn over. Bringing one coin to the centre, and trying the action again, the rod now goes over, but the action is weak. Now, bringing the third again to the centre, the normal results are at once apparent. Under these conditions he found the strain on the rod was increased. It became a terrible strain, and frequently the rod would break.

Now what had happened with regard to the sovereign in the grass? It so happened that it had been placed between two small underground streams, both of which had set up a counter-attraction. Here then we have a very important fact and principle entirely overlooked by students. Lack of knowledge of this "counter-attraction" on the part of the testers and diviners has been the cause of apparent failures in tests set up by Sir Wm. Barrett, by *Municipal Engineering*, and other investigators. Mr. Timms has taken occasion to point this out to them. He gives an example. A diviner is placed in an open space and gets good results on a certain metal. Investigators not feeling quite certain of his result will approach him. Say that one goes towards him carrying on his person a gold watch, purse containing money, or other metals. At once a counter-attraction ensues laterally. The investigator says the "pull" is not regular. Others then will

approach and range themselves on either side, and they too will say the results are certainly not regular, for now there seems no action at all. As a matter of fact, they have negatived the whole themselves from lack of knowledge of the power of these counter-attractive influences.* Mr. Timms' discovery of this feature of the work, he claims to have been of more importance in the progressive understanding of the matter than any other point. Another thing not understood by investigators is that there is no action over stagnant water. Tanks, wells or cisterns are not "discovered" unless we except the fact that one diviner claimed to have found some such tank. Of course they were not. The "discovery" in this case was a guess—not divination, but where running water is present even ½in. supply pipe or a small overflow pipe can be traced and detected. Here is a case in point. On Frilford Heath, Berks, the position of a well to which an engine pump was required to be attached to take the place of a hand pump could not be found, although several trial holes had been sunk for it. Mr. Timms was called in for advice. He first located the line of the stream which fed the well, but the well was not in the best position on that line. The hand pump now was put in action, the water made to flow, and the pipe was successfully traced to the well, which was thus located. This supply was sufficient for the house but not for the lawns and gardens, and he subsequently located a further supply sufficient for these needs. Within a mile or so of this spot houses have been erected at a place most favourable for the water supply. Such results are now of fairly frequent occurrence, for it is becoming the practice of architects in various parts of the country to choose the position of houses in accordance with the best line of flowing water determined by the diviner.

Following on the counter-attraction and laboratory tests, Mr. Timms now decided to read up the evidence available on the subject, as he had hitherto worked without such assistance in order, as he says, to keep his theories clean. He made the amazing discovery that his University friends who had read up everything written in English on the subject, were already far behind him in

* In Professor Reichenbach's "Researches in Magnetism" (1845) it is stated that many of the sensitives employed by him who could see the flames from magnets, used to say that they could see better when he was at a certain distance from them and also when the magnets were not too near the sensitives themselves. Several described the effect of the Professor's proximity in the same way—as if the flames became smaller and more turbid. Others saw flames about a foot high entirely disappear, leaving only a faint glow behind as the Professor accidentally came near a magnet. When he retired the flame returned, and this was repeated many times. This was also verified by sensitives unaware as to what caused the change. One stated that if the Professor were nearer the magnet than 40 c.cm. the effect was noticeable. When he approached from either side different poles of the magnet were affected. This would seem to illustrate Mr. Timms' theory of "*counter-attraction*" in relation to the "odylic" force of which Reichenbach made such a comprehensive study.

their knowledge of its technique. His only plan, therefore, was to press forward with his own investigations and work, and in so doing he discovered that the honest sceptics became ultimately his chief colleagues and supporters. He states that he has been invited to give practical demonstrations to a very large number of doctors, who were interested, of course, in the muscular action development. In one case two doctors each held one of his arms and afterwards held the arms of a sceptical gentleman who claimed to be able to produce the same action by ordinary effort. The doctors' report amounted to this, that the two modes of muscular action were entirely different, one being a definite action of the muscles themselves, and the other merely muscular resistance.

In passing over a river or stream, it makes no difference whether the diviner is in a boat, on foot, in a car or train, the action is unaffected. The latest experiment in this connection he quotes in conclusion of this phase of the subject, ***Oxford Times***, of May 26th, 1923:

> "To test the divining power at a height without contact with the ground, an interesting experiment was made by Mr. J. Timms, Oxford's water diviner, on Saturday night. For a considerable time it has been a vexed question whether water could be located with the divining rod without direct contact with the earth, but Mr. Timms has now satisfied himself on the point. Taking a flight in an Avro machine, the rod in the hands of the diviner indicated the exact lines of crossing the river, although at a thousand feet up it was difficult to see just where the plane was crossing. The canal, being narrow and sluggish, only recorded a short turn, but the Isis gave three or four sharp turns of the rod. The Cherwell, being narrower, gave two sharp turns of the rod on the heavier flow, one on the weaker. Following on the successful mapping of underground streams in the Oxford area of about thirty square miles, where much valuable information has been gathered, a more important scheme is at present under investigation in the London area. This work appears likely to upset a very widely accepted theory based on geology. Of divining it can be said that it is eminently not an amateur's job. Many complex things can cause slipshod work to anyone merely having the 'gift' or 'extra sense' without a liberal education in the use of it. The geological idea that water is everywhere if one goes deep enough is disproved by Mr. Timms. In Kent in the early part of this year, with the aid of Mr. Timms, a successful well was developed at 33ft., but before he was 'called in,' at 200yds. from the present well a boring had been made hundreds of feet deep with practically no result. In Buckinghamshire two wells had been sunk 50ft. deep with no result and one was filled in at the time of getting professional help. A third

well sunk on the line indicated produced all that was required at 26ft. and only 5yds. from the filled in site."

Direction of the Action.

To obtain a reaction on any given object, either running water or metal, the diviner must be above or in close proximity to the object, which must also be below the level of his rod. No action whatever takes place with the object above the diviner. Even whilst travelling in the Severn Tunnel, the passage of the enormous volume of water overhead had no effect upon the rod. The upright position of the upper part of the diviner's body has also an important bearing upon results.

In the course of an address at the British College of Psychic Science, Mr. Timms stated various theories advanced as to the origin of the diviner's power. Some claim that it is due to a subconscious use of the muscles; others explain it as an electric or magnetic force. Mr. Timms had inclined to the opinion that the nature of the power is not directly electric or magnetic, but of a nature kindred to both and conveyed to the body of the diviner by emanations from the object divined. Mr. J. Hewat McKenzie put a question to Mr. Timms, the result of which was to cause some alteration of his previous view. The theory suggested by Mr. McKenzie was that the power came downward through the atmosphere, using the diviner as a medium to carry the same to the object divined. This query Mr. Timms, at the time, was unable to answer, but he promised to investigate the matter, and within a week he was able to write an answer which practically confirmed the correctness of Mr. McKenzie's theory.

He made the following test—knowing already that metal objects such as purse or watch were best removed from the person whilst divining; after various changes in the position of metals had been tried he hit upon the idea of keeping metals on him, but above the waist line; the level of the divining rod being roughly the line of the hips. Under this condition good results were obtained in the location of a metal object on the floor. Now removing this object from the floor and placing it in a position above the waist-line and level with the metals he was carrying; on resting the rod above the level of the metals an immediate response was obtained by the metals on his body. This he thinks was fairly clear evidence of Mr. McKenzie's theory.

Last November, Mr. Gilmore, a Government scientist, on having this point demonstrated, put another query as follows: "If we assume it is to be necessary for the diviner to be in a position forming a letter T,* with the apex of the rod as its base, what would happen if you reached out from a horizontal position,

* What he actually said was "a cross." This hardly seemed expressive, and we have ventured to substitute "a letter T."

as, for example, lying face downward, and reaching out with the rod over the object from a couch or table ? " This direct question Mr. Timms tried out at once, with the astonishing result that all tendency to action of the rod disappeared. Rising to his feet to make certain that this was not due to some unseen counter-attraction he then found that a full action of the rod was obtained. These experiments are very suggestive, but of course not conclusive, as establishing any clear view of the conditions ruling the action of the force. He will, therefore, be glad if any reader of this article would suggest some other means of verification, for here we have a force like the X-rays, Röntgen Rays, wireless waves and so forth, which are being used to constantly greater advantage, but whose full possibility of use may be far beyond our present comprehension, since our knowledge must be admitted to be still in its infancy.

We appreciate the able pioneer work which Mr. Timms has done, work so difficult of accomplishment with an atmosphere of scientific prejudice on the one hand and old superstitious notions on the other constantly encountered. It is unfortunate that so many men of real status in one or other branch of science will persist in refusing to recognize much which does not happen to be akin to their own line of thought, and will hence be but too ready to brand as superstition that which they cannot understand and follow. This might be called educated superstition, a standing on the narrow ground of ascertained facts and the refusal even to look into matters which have a claim to the serious attention of those of broader outlook, either from some fear of the particular subject or else sometimes from that conceit which considers what the scientific specialist does not know is not worth knowing.

To be continued

ADVENTURES IN DOWSING

This article, by the late Major S. H. Godman, is reproduced from the National Review *of August, 1935, by permission of the Editor. It was, of course, written before the recent scientific investigations had been carried out.*

Opinions about Dowsing, or Divining, which has been practised in some form or other from times immemorial, are much to the fore in the present day, as recent correspondence in the press indicates. The views expressed are not always in harmony, though on striking a balance it would appear that there is a

widespread belief that "there is something in it." A short account of the experiences of a dowser may therefore be of interest to those who desire to pursue the subject. The narrative is fragmentary, and the interests of brevity necessitate the all too frequent use of the first person singular.

I have tried the rods of professional diviners after seeing them at work, but, not meeting with any success, I had to admit that the rod would not work for me. When I was past sixty, I read a book on dowsing called "Le Sourcier Moderne" by the Vicomte Henry de France, which has since been admirably translated by Colonel A. H. Bell, the founder of our Society of British Dowsers. I carried out the instructions given in the book, confining myself entirely to the pendulum, and in about three weeks I was able to succeed in most of the exercises described by M. de France. I then made myself a whalebone fork, but try as I would I could get no response from it, nor from hazel twigs or other wooden or metal forks.

That same year I went to Scotland on a visit. The chauffeur there, whom I will call G., was quite expert with the rod, but had never heard of the pendulum. He used a forked privet twig, and one day when I took the rod from him I found to my surprise that it moved for me when passing over an underground stream. Thinking this might be due to some of G.'s influence left in the rod, I cut myself an oak fork. I found this also worked for me, and when I tried with my whalebone fork the results were equally satisfactory. Since then the rod has been just as responsive to me as the pendulum. G. and I generally managed to get half an hour's practice together every day, very much to our mutual benefit.

Every substance, animate or inanimate, may emit rays or waves, as modern researches into the constitution of matter have demonstrated. Now dowsers find that the rod and pendulum behave differently in the presence of different objects, a specific number of spins to the pendulum or lifts to the rod characterising various substances. These repetitions are termed the serial numbers. In metals, for instance, the serial number of iron is 4, copper 5, silver 7, gold 11, and so on. The serial number indicates quality only and has nothing to do with quantity. Thus a pound or a ton of iron has a serial of 4, a threepenny bit or half-crown a serial of 7. If, as is generally supposed, these rays or vibrations are of the same nature as electricity it can scarcely be the electricity with which we are familiar, for if I put iron on some other substance inside a glass bottle with a ground glass stopper and stand the bottle on a sheet of glass, I still get the correct serial as easily as if the substance were in the open.

After completing the serial number with the pendulum, the pendulum oscillates, but in a definite compass direction for each substance. Thus with gold the oscillation is from east to west,

with the long swing to the west; with silver the oscillation is from west to east, with the long swing to the east; and with iron the oscillation is north to south, with the long swing to the south. When looking for any substance other than water it is of great assistance to hold a sample of that substance in the hand.

One day G. told me he had located copper inside one of those ancient stone circles which are not uncommon round Inverness. I went to the place and located copper in the same position. Another day, similar indications of copper or bronze were noticed by me at another stone circle. I made a rough map of the place and for the purposes of identification put in a small stream which tunnelled under the circle. When I got home, I spun my pendulum over this map for no particular reason. To my amazement the pendulum gave the sign for water over the stream which I had put in. With a pointed match in my left hand and my pendulum in the other, I then tried over a 6-inch map, pencilling in where the pendulum indicated water. On going over the actual ground I found my pencil marks were approximately correct. I told G. what had happened and handed him the map, telling him to try his luck over it. He apparently also had this gift, for the next day I located water on the ground corresponding to his pencil markings. Although I had read in French brochures of this map reading by dowsing, the whole thing seemed to both of us to be utterly inexplicable. Yet there was our own evidence staring us in the face.

In 1933, I located some water for a lady in Scotland. I estimated the stream to be 21 feet down with a volume of about 100,000 gallons daily. G. and I went there a few days later and he agreed with my findings. The lady also called in a third dowser, a stranger to both G. and me, who found the same position and depth, with a very strong, though uncalculated, flow. The lady therefore ordered her men to dig there. Not hearing from her for some time after I had come south, I wrote for news. She replied that they had dug down 24 feet and that beyond a slight oozing at 12 feet they had found no water. She had again called in the third dowser and his verdict was that there was no longer any water where he had located it before. He could give no sort of explanation; the stream had vanished! I got out my 6-inch map and found to my astonishment that both rod and pendulum failed to indicate water at that point, but that at about 50 yards to the west both showed a stream, new to me, giving about 100,000 gallons. I sent for the 25-inch map and on its arrival found that about 8 gallons a minute (10,520 gallons daily) were coming down the original stream and that the new stream was not quite so strong as the 6-inch map had shown. The next day the old stream had gained 8 gallons and the new stream had lost 8 gallons. During the next fortnight I watched the old stream increase to 60 gallons a minute and the new stream

sink proportionately. I wrote to the lady expressing the hope that all was well again. She replied that they had had a fortnight's continuous rain, that the 24-foot hole was full, but she could not tell whether this was spring water or soakage. Meanwhile, she had put in a pipe and was syphoning the water down to the house. I heard later that she had left the hole as it was, and that there was always 20 feet of spring water in it, although she was using a large quantity daily.

Many theories have been advanced to explain why the dowser's instruments move for water and other substances. The theory which most appeals to me is that the dowser is in many ways a sort of wireless machine differing from every other instrument in that it is human, and can therefore make use of rays, vibrations, or waves of some form of electricity and magnetism which no instrument, however delicately made, can ever record. These rays are picked up and conveyed to the sympathetic nerves of the brain which unconsciously tune themselves to receive them. These nerves affect certain muscles, causing a tension, and it is this tension which really gives a movement to the dowser's instruments. The operator, however, is quite unconscious of this tension. He has no control over his muscles, just as the muscles have no control over themselves, but have to obey the sympathetic nerves, and these nerves are entirely under the influence of the varying wave-lengths of the rays to which they are unconsciously tuned in. May it not be that some of these mental rays or waves may be as yet quite unknown to the scientific world? The scientist works with mechanical instruments, the dowser works with human instruments.

There are some good water-finding machines, but I understand that they have to be carried about until they are over water and then they can testify to its presence and can gauge the depth and volume with accuracy. They have, I believe, no power to prospect for water as has the dowser. For instance, I can go up to a gate and range round the field beyond with my rod. When the rod comes opposite to underground water it lifts and gives me the sign for water. Without leaving my position I can, by tapping with the foot, ascertain the distance the stream is from me, its depth below the surface, the volume and direction of the stream and it potability. The dowser, by making use of this mental ray, is able to receive information telepathically from practically any distance. Dowsing from maps, photographs, and handwriting is, I think, only an enlargement of this. Distance is nothing. A map-reading dowser can locate water accurately in China, New Zealand and Brazil in the same morning from his rooms in London.

Thousands of people could learn to dowse if they took the trouble to learn, and among these would be a proportion of potential map readers. There are many authenticated cases where people have received mentally news of misfortune or

death of relatives or friends at a distance long before any telegram or cable could have reached them. The coloured population of Honduras are credited with having known of the outbreak of the Indian Mutiny before the news reached London. May not these be examples of even untrained people making use of the mental ray? Possibly, in less "civilised" times, the gift was more commonly practised than it is to-day.

To some people the pendulum is probably more sensitive than the rod, as by adjusting the length of the cord it can be tuned in for some particular substance to the exclusion of every other substance. The method adopted to get the exact adjustment is to place a sample on the floor and swing the pendulum over it, at the same time letting the cord slip slowly through the finger and thumb. At point **X**. the pendulum will begin to *spin* and will continue to do so till the cord has been lengthened to **Y**., when it reverts to *oscillation*. At points **X**. and **Y**., the pendulum, if tried over the palm of the left hand, will at once begin to spin. Somewhere between **X**. and **Y**., the pendulum will only oscillate over the left palm. This is the exact adjustment. Thus, if the dowser correctly tuned in to coal were to walk across a country with many underground streams the pendulum would only respond to coal. Tuned in to electricity, as can be done over a hand torch, the dowser by extending the left hand skywards could get the direction of an aeroplane hidden from him either by darkness or clouds. Directly the left hand loses the correct direction of the plane the pendulum reverts to oscillation. Had this pendulum been incorrectly adjusted for electricity, it would probably only have responded to the water in the clouds.

Most doctors who have made a study of dowsing, or radiaesthetics to give it a more dignified name, are agreed that if the pendulum spins the same way over a certain food and over the left palm of the would-be consumer, the food is wholesome to that particular individual. If it spins the reverse way, it is unwholesome to that individual. If it merely oscillates, it indicates that the food contains little or nothing that is nourishing to that individual. This opens a wide field for investigation.

Even though dowsing be not accepted as a science, there is no reason for discouragement. The range of subjects to which dowsing can be successfully applied is increasing month by month, and many of the costly methods now employed in research work might with advantage be discarded in favour of the dowser's art. Day by day, the art is becoming more successful in the various subjects taken up, and so long as we can continue to register successes we can advance side by side with some of the scientific processes, until sooner or later science adopts us as the human instrument for the solution of subjects too impalpable for mechanical methods.

NOTES AND NEWS

Mr. F. E. Bramley writes :—

I have had one job of searching for lines of land drains in connection with a farm draining scheme at Burton near here. The draining contractor had a mole draining outfit and wished to know where the old pipe drains were, in order to use some of them for his main run-off drains. I used an old piece of pipe for a sample, and was successful, as all the pipe lines were there when we dug on the spots the rod indicated. It was during the hot dry weather we had in July, so no water was running through them. The fields have been greatly improved, so the farmer has decided to have the remainder of his land drained in the same way. He is getting me to find the positions of these pipes also. Most of the pipes proved to be of the old horseshoe type ∩. These were used may years ago and they appeared to have sunk into the ground and become plugged up, thus rendering the fields waterlogged.

A rather interesting thing happened in the first large field I was prospecting over. I had found the positions of the pipes on half the field, then my rod refused to work on the remaining half of the field. The pipe lines had been laid to run from North to South, and I walked from East to West and my sample had given the serial number of 12 for each position, which proved to be correct. When I got no further movements over the other half of the field, the contractor said there must be more pipes there, and he found a depression in one spot where he said I should likely find more. I could get no reaction from my rod, however. We dug down 4 feet and found another line there. On chipping a piece of the pipe we found red pebbles in the clay from which it had been made, whereas my sample had particles of chalk in the pipe. I found the new piece of pipe gave 10 serial movements, so I used it and found the remaining missing pipelines with it. On trying it over the pipes over the first half of the field I found it refused to cause any rod action. So we came to the conclusion that the pipe layers must have run out of pipes and had to obtain a supply from *another* brickyard, the clay of which differed from their first supply of pipes. It proves how careful a dowser has to be when prospecting for objects.

* * * * *

A member has drawn our attention to an early instance of dowsing quoted from Lilly's *Life and Times* in the note on David Ramsay in Chapter I. of Sir Walter Scott's *The Fortunes of Nigel*, to the following effect :—

"David Ramsay, his Majesty's clock-maker, had been informed that there was a great quantity of treasure buried in the cloister

of Westminster Abbey. He acquaints Dean Withnam therewith, who was also then Bishop of Lincoln. The Dean gave him liberty to search after it, with this proviso, that if any was discovered, his church should have a share of it. Davy Ramsay finds out one John Scott, who pretended the use of the Mosaical rods, to assist him herein.* I was desired to join with him, unto which I consented. One winter's night, Davy Ramsay, with several gentlemen, myself, and Scott, entered the cloisters. We played the hazel rods round about the cloisters. Upon the west end of the cloisters the rods turned one after another, an argument that the treasure was there. The labourers digged at least six feet deep, and then we met with a coffin; but which, in regard it was not heavy, we did not open, which we afterwards much repented.

"From the cloisters we went into the abbey church, where, upon a sudden (there being no wind when we began) so fierce and so high, so blustering and loud a wind did rise, that we verily believed the west end of the church would have fallen upon us. Our rods would not move at all; the candles and torches, also, but one were extinguished, or burned very dimly. John Scott, my partner, was amazed, looked pale, knew not what to think or do, until I gave directions and command to dismiss the demons; which, when done, all was quiet again, and each man returned to his lodging late, about twelve o'clock at night. I could never since be induced to join with any such like actions.

"The true miscarriage of the business was by reason of so many people being present at the operation; for there was about thirty, some laughing, others deriding us; so that, if we had not dismissed the demons, I believe most part of the abbey church would have been blown down. Secrecy and intelligent operators, with a strong confidence and knowledge of what they are doing, are best for the work."

In two respects this episode reminds one of many a failure made by the dowser of to-day, (1) A coffin, doubtless containing many pieces of metal, was the cause of a false location, (2) The dowser was disturbed and rendered inefficient by the presence of a multitude of sceptical onlookers.

There is at least one other instance of dowsing in the Waverley Novels, namely, in Chapter XVII of *The Antiquary*, in which Mr. Dousterswivel, a native of Westphalia, discovered a well beneath the floor of the kitchen of a ruined priory, to the surprise of his audience and confusion of the sceptical Mr. Oldbuck.

* The same now called, I believe, the Divining Rod, and applied to the discovery of water not obvious to the eye.

* * * * *

In the *Isle of Ely Advertiser* of October 29th, in an article on the death of Mr. H. R. Jeffree, a well-known farmer and fruit grower, it was recalled that some years ago, during a long period

of very dry weather, Mr. Jeffree obtained the services of a water diviner to find drinking water in one of his fields at Collett's Bridge. Water was found and a borehole sunk, but the scheme was found impracticable, mainly on the score of expense.

* * * * *

The *Aberdeen Press and Journal* of November 20th stated that a diviner who claimed to be able to locate persons under the debris of bomb-damaged buildings had offered his services to the A.R.P. authorities.

* * * * *

An account of an interview with the President was published in the *Wilts and Gloucestershire Standard* of November 22nd.

* * * * *

The *Daily Sketch* of December 2nd contained a picture of a German military water diviner dowsing for water with a wooden rod, presumably in Russia.

* * * * *

Picture Post of December 6th, 1941, contained a short article, entitled "The Water Problem," about the ancient underground channels which are being utilised by our troops in the Western Desert. It is accompanied by the same photographs which were used in connection with an article on the same subject which appeared in *Illustrated* of July 13th, 1940. (See *B.S.D. Journal*. 29, page 170). The pictures show (1) an R.E. Corporal using a whalebone divining rod, (2) a shaft to one of the channels being sunk in the sand, (3) the head of the completed shaft, (4) a view of one of the underground channels cut in the limestone rock.

In this connection the following extract from "Countryman's Notes" by Major C. S. Jarvis, C.M.G., O.B.E., which appeared in *Country Life* of December 5th, 1941, is quoted by permission of the Editor:—

The water supply at Mersa Matruh, so much in the news of our Army in the Libyan Desert, is most interesting, as it is carried by the ancient conduit that supplied the Roman town of Paraetonium, now Mersa Matruh, in the days of the Empire. Until about 1930 Mersa Matruh had no water supply beyond some very unpleasant liquid from a few surface wells along the shore, and then this huge underground conduit, mostly carved out of the natural rock with hand chisels, was discovered, still carrying water to the ruined site of the city from a catchment area about a mile away. The discovery of this was made in the usual fashion by a workman falling through into it and breaking a leg, and after some clearing out of silt was done a strong healthy flow of water developed.

This conduit flow, mixed with a supply brought by ship from

Alexandria, is now providing water for our troops, and I was told the other day, by an officer who has just returned from that front, that the Roman supply has been considerably increased in a most remarkable fashion, but as I heard the story at a cocktail party I will not vouch for its veracity. The story is that the Antiquities Department in Cairo, which despite its name is a very live-wire organisation, discovered among its various old Roman documents a plan of Paraetonium, drawn by a Roman military engineer some 1,500 years ago, and showing, among other things, not only the known water conduit, but some extensive subsidiary channels leading into it which were not known.

These plans were sent to the Royal Engineers in Libya, who found them so correct as regards measurements that they were able to locate the undiscovered conduits, open them up and thus increase the water supply in Mersa Metruh to a considerable extent. This is such a fascinating and romantic story that I should like to believe it, and, if the present Director of Antiquities is the man I used to know, he is certainly the type that would be able to use his archæological knowledge for the benefit of modern requirements—and not every archæologist will do this.

* * * * *

The discussion by the Brains Trust which was broadcast on December 21st included some interesting remarks by Commander Campbell, Lieut. Woodruffe and Dr. C. E. M. Joad. The latter referred to the experiment, already known to most of our readers, in which Captain Trinder correctly located the position of water on an ordnance map.

In a letter to *The Two Worlds* of January 9th, Mr. Harry Price gave details of the experiment, at which he himself was present. In a further letter to *The Two Worlds* of January 16th, Mr. Price relates how, many years ago, when building his house, he employed a firm of engineers to find water and sink a well. For a fortnight they were boring and experimenting in the garden, without success. At last they brought in an old water diviner off the South Downs, who discovered a plentiful supply within two hours.

BOOKS ON DOWSING AND HUMAN RADIATION

ENGLISH

Author	Title	Pages	Postage, pence
Maby and Franklin	The Physics of the Divining Rod	438	7
Barrett and Besterman	The Divining Rod	291	7
Mager	Water Diviners and their Methods (translation)	302	7
Kilner	The Human Atmosphere	300	6
Bagnall	The Origin and Properties of the Human Aura	192	5
Richards	The Chain of Life	213	5
Lakhovsky	The Secret of Life	196	7
Tompkins	Springs of Water and how to discover them by the Divining Rod	184	4
de France	The Modern Dowser (translation)	130	3½
Cook	Radial Detection	94	3
von Reichenbach	Letters on Od and Magnetism	119	4

FRENCH

Author	Title	Pages	Postage, pence
Bovis	De la Radiation de tous les Corps; and two addenda	127	2½
Béasse	La Radiesthésie, 1938	236	4
Brard et Gorceix	Balance Pendulaire de Précision	192	5
Bourdoux	Notions Pratiques de Radiesthésie	301	4
Brun	Le Sexe devant le Pendule	171	3½
Christophe	Apologie du Sourcier	216	3½
	Tu Seras Sourcier	223	3½

Author	Title	Pages	Postage, pence
Chantereine	Ondes et Radiations Humaines	119	3
Capron	La Radiesthésie ou Comment devenir expert dans l'art de capter les Ondes	94	1½
Diot	Les Sourciers et les Monuments Mégalithiques	118	4
Colson	La Baguette du Sourcier	30	1
de France (fils)	L'Intuition et la Radiesthésie	31	1
de France	Le Sourcier Moderne (5th Edition)	188	3
	Le Pays des Réformes	138	2½
	Souvenirs d'un Sourcier	175	3
	Radiesthésie Agricole	12	1
Gachot	Baguette et Pendule	131	3½
Gorceix	Lumière, Electricité, Magnétisme en Radiesthésie expérimentale (Suite à la Balance pendulaire de Précision)	179	7
	Nouveaux Appareils de Mesure pour la Radiesthésie	30	2
Lacroix-à-l'Henri	Manuel théorique et pratique de Radesthésie	212	5
	Théories et Procédés Radiesthésiques	187	4½
Lakhovsky	La Nature et ses Merveilles	214	4½
	Le Secret de la Vie	258	5½
Larvaron	Radiobiologique	197	3
	La Radio - Tellurie. Ses Applications en Hydrologie, Géologie, Minérologie, Biologie et Physiologie	131	3
	La Radio-Tellurie, appliquée à la Recherche de l'Eau	32	1½
Lemonnier	Cours de Radiesthésie	117	3
Mager	Les Sourciers et Leurs Procédés	381	7

Author	Title	Pages	Postage, pence
	Les Nouvelles Méthodes de Prospection	175	3½
	La Genèse des Atomes	32	1
	La Méthode Radio-Physique	20	1
	L'Eau H.M. Amétallique	8	1
de Marsay	Electricité. Magnétisme. Radiesthésie	123	3½
Martin	DiagnosticRadiesthésique	124	3
	enMédecine-Vétérinaire	124	3
	Vie. Etres. Radiations	16	1
Merle	Radiesthésieet Préhistoire	54	1½
Mermet	Comment J'Opère	211	3½
	Le Pendule Révélateur	106	1
de Mersseman	Le Pendule Magique	115	2½
Montandon	Des Mouvements de la Baguette et du Pendule chez les Rhabdomanciens	98	2½
Orcel	Radiesthésie Agricole	236	3½
Regnault	L'Art du Sourcier	24	1
	Biodynamique et Radiations	276	7
	Sorcellerie : ses Rapports avec les Sciences Biologiques	366	7
	Fille ou Garcon	273	4½
	Les Organismes considérés comme des Oscillateurs Résonateurs Polarisés	20	1
Padey	Traité complet des Secrets de la Baguette :		
	Vol. I. 3rd Edition. 1930	536	
	Vol. II. 2nd Edition. 1929	239	7
	Supplement. 1930	42	
Pitois	La Condensation Radiesthésique et ses Applications	32	1½
Pollak	Le Fluide Vital Guérisseur	92	2
Serres	L'Homme et les Energies Astrales	117	3

Author	Title	Pages	Postage, pence
Serres	La Verité sur la Radiesthésie		4
Viré	Comment devenir Sourcier	199	3½
Voillaume	Essai sur les Rayonnements de l'Homme et des Etres Vivants	91	3
Comptes-Rendus du :			
	Congrès International de Radiesthésie. Liége. 1939	457	6
	Congrès de Brignoles. 1933 (Puisatiers et Sourciers)	59	2½
	Premier Congrès International, à Avignon. 1932	246	5

SPANISH

Pericás	Investigación de Aguas Subterráneas	503	7

ITALIAN

(Compilation)	Atti del i° Congresso Internazionle di Elletro-Radio-Biologia (2 volumes)	1339	12

GERMAN

von Klinckowstroem und Maltzahn	Handbuch der Wünschelrute	316	7
von Pohl	Erdstrahlen als Krankheitserreger	214	5½
Dobler	Physikalischer und Photographischer Nachweis der Erdstrahlen; Lösung des Problems der Wünschelrute	70	2½

Author	Title	Pages	Postage. pence
Fritsch und Jelinek	Beiträge zur Physik der Wünschelrutenfrage	168	4
Jenny	Das Wünschelrutenproblem: Experimentelle Untersuchungen über biologische Wirkungen der sog. Erdstrahlen	42	2
von Rolshaussen	Wünschelrute, Siderisches Pendel. Erdstrahlen: Wahrheit oder Dichtung?	131	2½
Gachot	Wünschelrute und Pendel; Dichtung und Wahrheit	112	3
Dietrich	Die Wahrheit über das Pendel	117	3
Mannlicher	Auf dem Wege zur endlichen Lösung des Krebsproblems	83	2½
Henrich	Wünschelrute und Erdstrahlen	64	2
Falkinger	Die Wünschelrute, 1923	148	3
von Bühl	Kampf den lebensfeindlichen Erd-Strahlen	57	1½
Herzog	Wünschelrute	93	2
Walther	Das Rätsel der Wünschelrute	61	1½